

CREST  
AUDIO®

CV 20





Ideally suited for both Front-of-House and Monitor applications, Crest Audio®'s new CV™ 20 provides complete flexibility for any Live sound application. CV 20 includes those features most-desired by touring and permanent installation engineers. Full-VCA control is provided, not only on input channels but also on group masters (aux masters in fader reverse mode) and L/R and Mono masters for maximum control of complex mixes. Four band sweep able EQ with Q control on the mids and a variable High Pass Filter are provided on all mono inputs. 12 auxiliary sends and 8 sub groups are standard on all CV 20 models with fader reverse functionality for easy use as a monitor console.

CV 20 consoles are supplied with either 24, 32, 40, 48 or 56 mono input channels, plus 8 full stereo input channels. Basic configurations for all consoles included 12 auxes, 8 subgroups, Left/Right/Center/Mono with full metering. Also provided is an 11x4 matrix, full dynamics which can be either routed to the subgroup and L/R/M buses or auxiliary masters, true LCR panning on mono inputs and subgroups and full metering on all main outputs (Auxes, Subgroups, L/R/M buses). CV 20 also comes stock with a total of 16 mute groups, 136 mute scenes and 128 VCA assignment scenes. One Internal Field replaceable, power factor corrected, universal power supply is standard on all CV 20 frames.

An optional expansion system enables the addition of a second internal PSU and a 3rd external PSU. Also provided is an optional meter bridge with analog metering of all main outputs (VU), bus link I/O module for linking multiple CV 20 frames and modules to deal with digital audio transport.







**8 sub groups**

**8 VCA masters**

**Semi-modular inputs in blocks of 8**

**Inserts on all mono and Main outputs**

**Optional Meter Bridge to monitor outputs in VU**

**LED bar graph metering on all inputs and outputs**

**True LCR panning from mono inputs and subgroups**

**Optional Bus Link modules to link 2 consoles together**

**Optional Digital audio transport modules**

**Frames sizes available 24, 32, 40, 48 and 56 mono + 8 stereo**

**Flexible design allowing FOH, Monitors or Monitors from FOH applications**

**Fader reverse function allows fader and VCA control on aux outputs**

**12 auxes with flexible configurations (1-4 mono, 5-10 switch able between mono and stereo, 11 & 12 stereo with pre and post switching in the same configuration)**

**Full dynamics on all main outputs (L/R/M and subgroups) that are routable to the Aux masters**

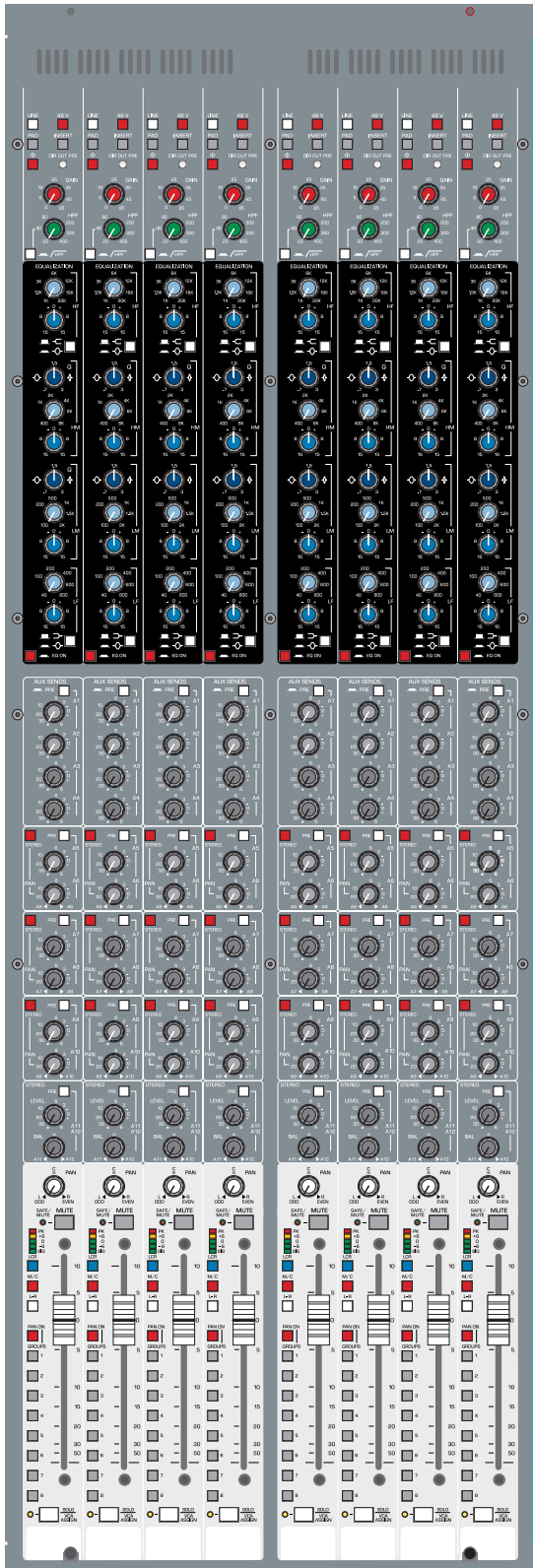
**16 mute groups, 136 mute scenes and 128 VCA assignment scenes with easy editing, snapshot automation and MIDI/RS485 control**

**USB Link for saving settings via a jump drive or external control via Crest Audio's NexSys® audio control software package**

**Direct outs on all inputs (Switch able between pre and post fader from the top of the surface)**

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**M**ono input module blocks are made up of assemblies of 8 channels. Each channel includes switches for; 48 volt phantom power, -25 dB pad and polarity in addition to a high quality mic pre-amp that features high headroom, high slew rate and excellent CMRR performance. Also provided on all mono inputs is a high-pass filter that is variable between 20 and 400 Hz.

Separate ¼ inch jacks are provided for a pre-EQ balanced send and a balanced return at a nominal level of +4 dBu. Insert on/off switching is also provided to allow permanent patching.

Four-band EQ is provided with sweep able high and low frequency points and selection between shelving and peak, full parametric control on the mid bands with frequency sweeps and Q control. The entire EQ circuit can be bypassed by disengaging the EQ ON Switch.

12 auxiliary sends are divided into 3 versatile sets. 1-4 being fixed mono sends with their own pre/post switch. 4-10 are switch able between dual mono and stereo with pre/post switches per pair and 11 & 12 are fixed stereo with pre and post selection for crucial “In ear monitoring” applications. The default “pre” selection is pre-fader/post EQ, but internal options allow this election to be changed to pre-EQ.

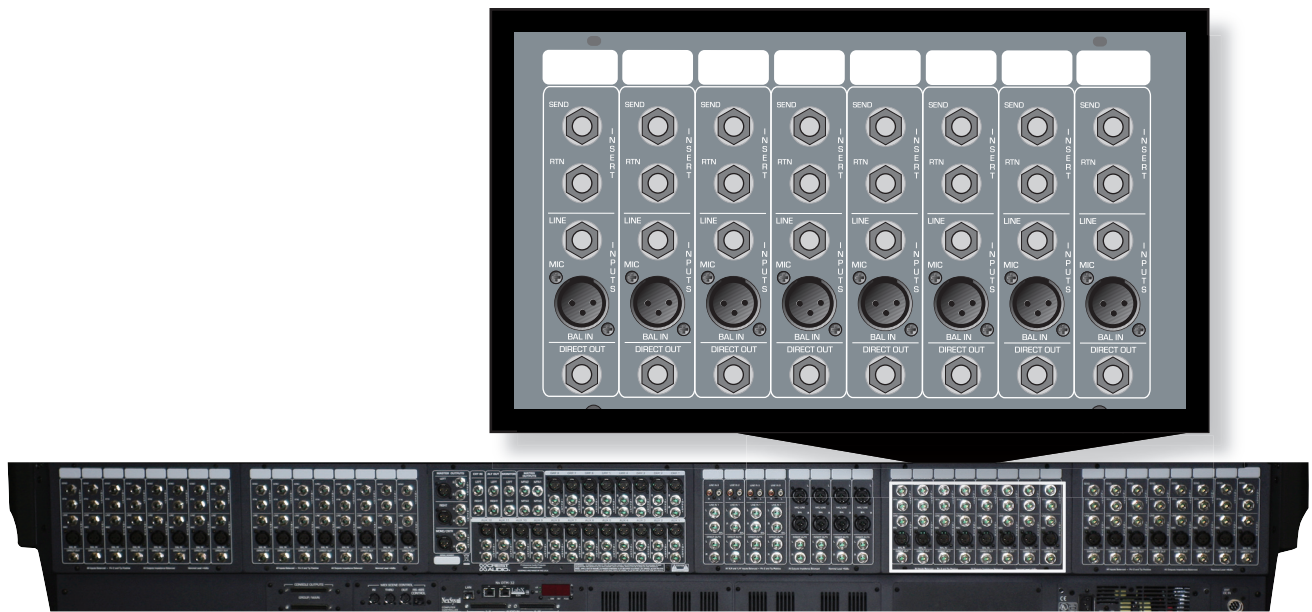


8 Subgroups are also provided for conventional groupings of the inputs via 8 individual assignment switches. Stereo panning between group pairs can also be achieved by selecting the "PAN ON" Switch.

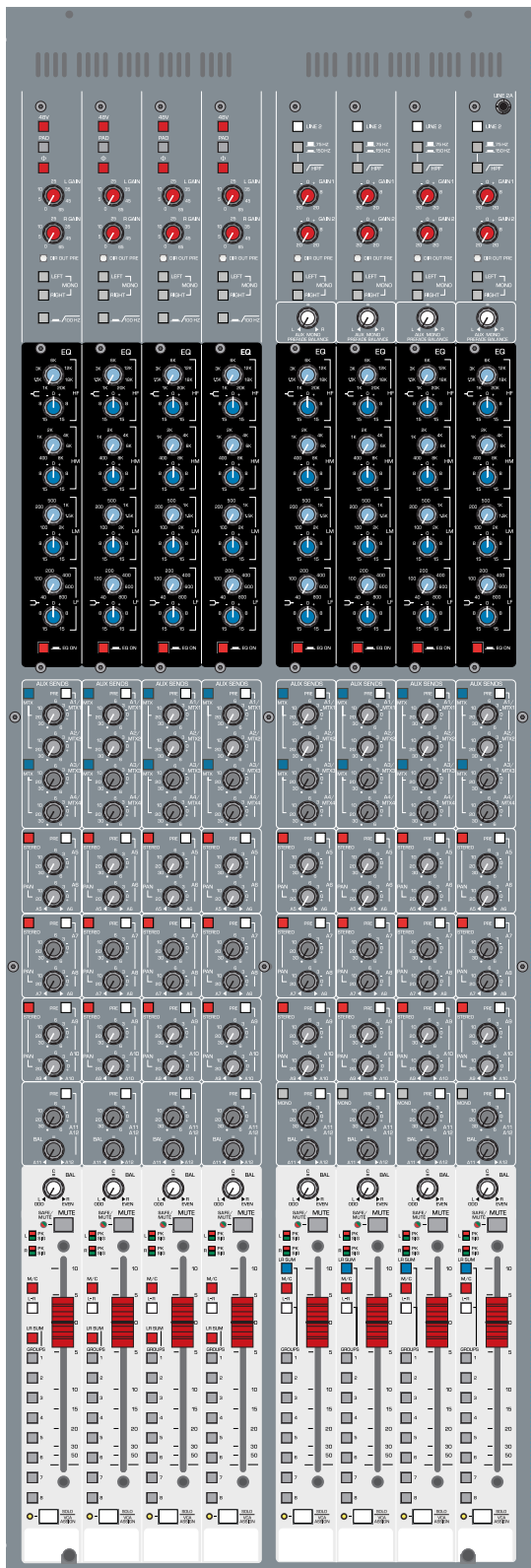
Left/Right and Mono routing is done by pressing either the L-R or M/C switches. A separate LCR switch is provided. This allows panning between the Left, Mono and Right buses for LCR applications.

A high quality 100 mm fader is standard on all inputs with 10 dB of gain when in the full up position. Also provided is full VCA control of the fader via a soft VCA assignment and mute control locally or via grouping (see master control block).

The Solo switch allows PFL or AFL monitoring of the channel selected from the master section. The Solo Switch is also part of the VCA assignment (see master section). Other monitoring functions include a 5-segment bar graph meter for maximum visibility.







**E**ight full-time stereo channels are provided standard on all CV™ 20 frame packages with the ability to add more modules on custom frame packages. The stereo module is divided into two types of channels.

The first four stereo input channels allow mic and line level inputs. Each of these channels feature switches for 48-volt phantom power, -25dB PAD and polarity. Included on each mic/line stereo inputs are two separate gain controls for Left and Right signals as well as Left/Right sum mono switches.

The second four stereo input channels allow patching of 2 separate stereo line signals. The first gain control is a stereo gain pot that controls the 1/4 inch inputs and the second controls the RCA inputs for “set and forget” operation. Switching between the 2 inputs is via the Line 2 switch. A selectable HPF filter is also provided on all dual line inputs that can be selected between 75 and 150 Hz. Left/Right and Mono switching is also available as well as a pre-source balance pot to send a discreet blend of the stereo signal to the Auxes.

A four-band sweep able EQ is provided on all stereo inputs for full EQ control of stereo signals. The stereo inputs also provide 12 Auxiliary sends with the first 4 sends switch able to the Matrices. This allows the Matrix to be expandable from 11 x 4 to 19 x 4.

Bus/Mute and VCA assignments are just like the mono inputs. Monitoring is via the Solo bus and separate signal and peak displays for each channel.

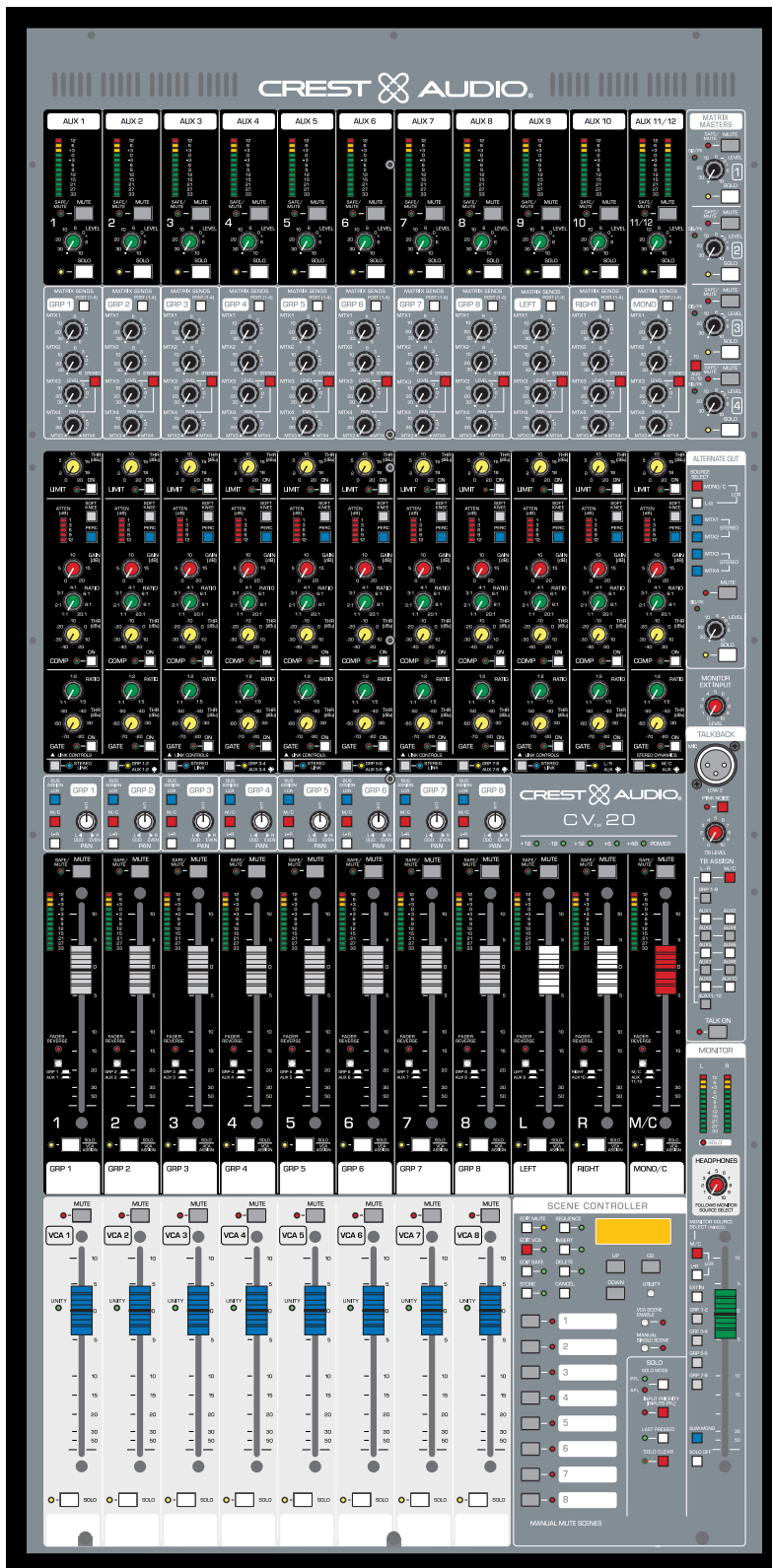




STEREO INPUT MODULE

  
CV 20





The Master Module block contains the main audio buses and their associated controls, VCA masters and Mute group/ scene masters and functions including monitoring and talk back.

8 VCA masters are standard on all CV™ models. Assigning Channels to a VCA is via “soft assignments”. With a channel assigned to a VCA, not only can the channel’s post fader level be controlled by the VCA master but the channel can also be muted and soloed from the master.

8 sub-groups are also provided on CV models for conventional grouping each with their own 12 segment bar graph metering. From the sub group signals can be sent to the L/R and Mono buses. With the LCR switch engaged panning between the Left, Right and Mono buses can be applied for LCR applications.

Separate Left, Right and mono bus controls are also provided on all CV units with 12 segment bar graph metering for each bus.

Each subgroup and main bus can also be sent to 4 Matrix outputs 1 & 2 Matrix buses being fixed mono and 3 and 4 being switch able from dual mono to stereo sends. Matrix level control is provided via rotary controls with Matrices 3 & 4 having the expanded ability to route to Aux 11 & 12 to add post processed sub-grouped audio to the Aux mix. The Matrix buses can also source signals from the stereo inputs as well. This makes Matrix expandable from 11 x 4 to 19 x 4.

12 Aux masters are also provided with separate solo and mute switches for each master. Mutes of Aux masters can be accessed locally or via the scene controls (see scene controller). Each Aux master also has its own 12-segment bar graph meter for monitoring purposes.



In FOH mode, the subgroups and main buses are controlled by the respective 100mm fader. By pressing the fader reverse switch on the subgroups or main buses, the fader controls the Aux outputs for use in Monitor console applications. In this mode, not only does the user have fader control on the Aux outputs but VCA control over the Aux masters as well.

Included on each subgroup and main bus master is a full dynamics section including a compressor, limiter and downward expander/gate for processing of sub-grouped mixes.

Each group pair can be stereo linked for Stereo processing and can also be routed in stereo pairs to Auxes for processing monitor mixes.

The Scene Controller microprocessor based mute and VCA assignment system comes standard on all models. The Scene Controller allows easy editing for mute and VCA assignment automation via a "soft mute assignment, providing 8 manual mute groups or scenes, 128 sequenced mute and VCA assignment scenes that can be controlled locally via MIDI and via RS485 devices. The Scene Controller settings can be saved via a Jump drive with via the USB interface underneath the armrest. The USB interface also has hooks to connect

a PC to program and control the Scene Controller via Crest Audio's NexSys® computer controlled audio systems hardware.

3 levels of SOLO are provided on all models. Inputs can be monitored all in AFL or In PFL. The input priority switch not only clears an output being soloed when selecting an input but also allows full-time PFL on the inputs and AFL on the outputs. A SOLO CLEAR switch is provided to clear all channels that are soloed as well as a solo off switch to eliminate the solo bus from the monitors. The LAST PRESSED switch also allows only one channel to be soloed at any given time.

Separate stereo Monitors outputs are standard on all CV™ models. Level control of the monitor output is via a separate High quality 100mm fader. The monitor output source can be selected from either the main/group buses or external input. A separate Headphone level is also provided. The Headphone output is found underneath the armrest.

An alternate output is also provided on all CV models that can be sourced from the main buses or any of the 4 Matrices. This can be used to send the mix to any other location whether it is a recorder, broadcast, or assisted listening devices.





### Meter Bridge:

An optional meter bridge is also provided for all CV™ frames sizes for analog monitoring (in VU) of all outputs. A total of 17 meters are provided on the meter bridge that is segmented into two sets. The first 12 meters can either meter both subgroups and

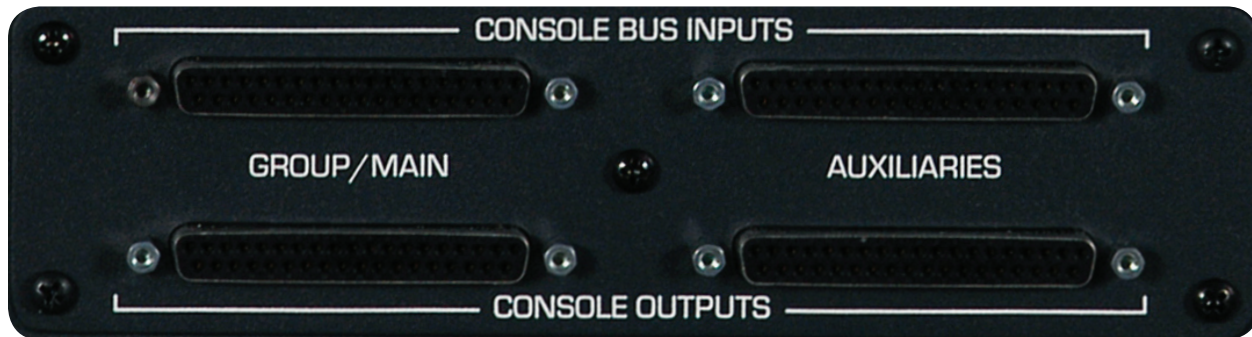
Matrix outputs, or by engaging the Aux switch, the meters will then monitor all 12 auxes. The second set of five meters are dedicated to Monitor the; Left, Right, Mono/Center and Solo Left and right buses.



### Power Supplies:

One Internal, Field replaceable, Power Factor Corrected, Universal Power supply comes standard with all CV basic packages. A second PSU bay is

provided on all CV units for a second redundant Internal Power Supply. Also a DC connector comes stock with CV units for External PSU options.



### Bus Link Module:

Easy linking of 2 CV-20 frames can be done with the optional bus link module. By using DSUB 37 connectors the buses from 2 consoles can be linked.

### Buses Include:

- Main Buses (L/R/M)*
- Sub Groups*
- Auxes*





Additional information about the MIDI controllers

The Scene Controller allows easy editing for mute and VCA assignment automation via a “soft mute assignment, providing 8 manual mute groups or scenes, 128 sequenced mute and VCA assignment scenes that can be controlled locally via MIDI and via RS485 devices. The Scene Controller settings can

be saved via a Jump drive using the USB interface underneath the armrest. The USB interface also has hooks to connect a PC to program and control the Scene Controller via Crest Audio’s NexSys® computer controlled audio systems hardware.





Frame Size	Dimensions (W x D x H in inches)	Weight	Lights
<b>CV20-32</b> Standard Models include 24 Mono inputs + 8 Stereo	<b>61.9 x 34.6 x 12.4</b>	<b>145 lbs.</b>	<b>3</b>
<b>CV20-40</b> Standard Models include 32 Mono inputs + 8 Stereo	<b>72.7 x 34.6 x 12.4</b>	<b>165 lbs.</b>	<b>4</b>
<b>CV20-48</b> Standard Models include 40 Mono inputs + 8 Stereo	<b>83.4 x 34.6 x 12.4</b>	<b>185 lbs.</b>	<b>4</b>
<b>CV20-56</b> Standard Models include 48 Mono inputs + 8 Stereo	<b>94.2 x 34.6 x 12.4</b>	<b>205 lbs.</b>	<b>5</b>
<b>CV20-64</b> Standard Models include 56 Mono inputs + 8 Stereo	<b>104.9 x 34.6 x 12.4</b>	<b>225 lbs.</b>	<b>6</b>



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